THE CITY OF SAN DIEGO

# MANAGER'S REPORT

DATE ISSUED: October 18, 2002 REPORT NO. 02-243

ATTENTION: The Committee on Land Use and Housing
Agenda of October 23, 2002

SUBJECT: City of San Diego Street Design Manual

REFERENCE: Report No. 02-024

## SUMMARY


Issue: Should the Land Use and Housing Committee recommend approval of the City's Street Design Manual Final Draft for adoption by City Council?

Manager's Recommendation: Approve the City's Street Design Manual Final Draft.

Other Recommendations:

- At its meeting on September 12, 2002, the Planning Commission recommended approval of the City's Street Design Manual Final Draft for adoption by City Council.
- At its meeting on June 25, 2002, the Community Planners Committee (CPC) voted to approve the recommended changes included in the May 2002 draft Street Design Manual.

Fiscal Impact - None


## BACKGROUND

In June, 2001, the Planning Department was asked to take the lead in updating the Street Design Manual. To guide us in making revisions to the manual, representatives from various interest groups and organizations and agencies were invited to participate on an ad-hoc committee. The ad-hoc committee had a total of 13 workshops from August to December 2001. The workshops culminated in several recommended changes to the Manual. Highlights of the recommended changes were presented to the Public Safety and Neighborhood Services and the Land Use and Housing Committees at its meetings on January 23 and January 30, 2002, respectively. Also, a

workshop and a hearing for the Planning Commission were held at its meetings of May 30 and September 12, 2002, respectively.

DISCUSSION

The first draft of the Manual was published for review in May 2002. The draft Manual was distributed to City departments as well as utility companies, Community Planning Groups, the Subcommittee for Removal of Access Barriers (SCRAB), Community Planning Chairs (CPC), Building Industry Association (BIA), Association of General Contractors (AGC), Sierra Club, and other interested organizations. The draft Manual was also posted on the City's web site.

The draft Manual was presented and discussed at the SCRAB meetings of March 14 and June 13, 2002. Also, a special SCRAB meeting was held on June 19, 2002, to discuss recommended changes to the draft Manual. The recommended changes were primarily related to the Pedestrian Design section of the Manual. SCRAB's comments were reflected in the Final Draft of the Manual. Also, at its meeting on June 25, 2002, the CPC voted to approve the recommended changes included in the draft Manual. Also, at its meeting on September 12, 2002, the Planning Commission recommended approval of the City's Street Design Manual Final Draft for adoption by City Council.

Since the release of the draft Manual in May 2002, the Planning Department has been working with other City departments including: Fire, Water, Metropolitan Wastewater, Development Services, Environmental Services, General Services, Engineering and Capital Projects and Transportation to address comments regarding the recommended changes to the Manual. Based on these discussions and input received from the various interest groups, organizations and agencies, a final draft of the Manual has been produced (Attachment 1).

The following discussion relates to major issues raised and our approach to address the issues in the Manual.

**Street width** – The Manual requires a 30 foot curb-to-curb width on low volume residential local streets where block lengths are less than 600 feet long, the street is greater than 600 feet from a canyon rim, and there are two access points to the street for emergency vehicles. The 30-foot wide streets offer several advantages including:

- Provides for the minimum separation between water, storm drain, and sewer mains required by the Department of Health Services, without having to place water mains under the curb, gutter, or sidewalk. Attachment 2 is an illustration of typical placement of underground utilities within a 30-foot wide street. The illustrated layout of utilities allows reasonable access to all underground utilities for construction maintenance and connection purposes without having to demolish street elements (curb, gutter and sidewalk). The maintenance of storm drains may require removal of curb and gutter because of its close proximity to the gutter. However, storm drain maintenance rarely requires street demolition.

- Creates traffic calming conditions without having to install additional physical

measures that induce traffic calming. Narrow streets also support neighborhood feel, scale, and character.

- The City has experience with maintaining and providing services along narrow streets. There are many 30-foot wide streets in older neighborhoods of the City.

Staff also explored reducing street width to 28 feet and found that it poses the following concerns:

- It would be difficult to accommodate all underground utilities within the 28 foot curb-to-curb width and still meet the 10 foot minimum separation requirement between sewer and water and storm drain mains, and provide reasonable access to water mains for maintenance and connection purposes (water mains would be placed 6 inches or less from the gutter line). Attachment 3 illustrates this.

- Automated refuse collection efficiency would be significantly impacted and some routes might require two person crews to assure safe maneuvering.

Furthermore, we had several follow-up meetings with the Fire Department to address the issue that travel widths less than 20 feet may increase emergency response time (see Attachment 4 - letter from San Diego Fire Chief Jeff Bowan, dated June 21, 2002). As a result, the Manual requires 30-foot wide streets to have 75 feet bypass zones at 150-foot intervals to allow emergency and other large vehicles to pull over for passing. These bypass zones can be achieved without significantly impacting on-street parking by using the "No Parking" zones in front of driveways.

We also researched minimum street widths used by different cities in the U.S. As shown in the following table, allowable roadway width, curb-to-curb, ranges between 22 feet to 40 feet. Many of those listed jurisdictions require specific thresholds to be met for narrow streets. These thresholds include density, ADT, traffic calming, curb return radius, alleys, and street classification.

| State | Jurisdiction | Street Width Standards (Parking on Both Sides) |
|---|---|---|
| California | San Diego County | 36 ft, 32 ft for cul-de-sac and loop roads |
| | Redwood City, City of | 34 ft |
| | Riverside County | 32 ft - 40 ft |
| | Santa Rosa, City of | 30 ft, ADT <1,000 |
| | Palmdale, City of | 28 ft |
| | San Jose, City of | 30 ft, <21 DU, 415 ft<br>34 ft, <121 DU |
| | Novato, City of | 24 ft, 2-4 DU<br>28 ft, 5-15 DU |
| Colorado | Boulder, City of | 30 ft, ADT 500-1,000<br>34 ft, ADT 1,000-2,500 |
| | Ft. Collins, City of | 30 ft |
| | Longmont | 36 ft<br>32 ft, ADT < 300 |
| | Fort Collins | 30 ft<br>24 ft, w/ alleys |
| Oregon | Eugene, City of | 28 ft, ADT <750<br>34 ft, ADT >750 |
| | Bend, City of | 36 ft |
| | Portland, City of | 26 ft, <2 acres/DU, 30 ft curb return radius |
| | Washington County | 28 ft |
| | Beaverton, City of | 28 ft, ADT 300-600 |
| | Tigard | 32 ft, ADT <1,500 |
| | Tualatin | 32 ft |
| | Hillsboro, City of | 28-30 ft |
| Texas | McKinney | 30 ft<br>26 ft, 2DU/acre |
| Tennessee | Johnson City, City of | 22 ft, ADT <240, parking not regulated<br>24-28 ft, ADT 240-1,500, parking not regulated<br>28 ft, ADT >1,500, parking not regulated |
| Michigan | Birmingham, City of | 26 ft |
| Montana | Helena, City of | 33 ft, with traffic calming |
| Nebraska | Lincoln, City of | 27 ft |
| Vermont | Burlington, City | 30 ft |
| Washington | Kirkland, City of | 24 ft, Low density only<br>28 ft |
| Wisconsin | Madison, City of | 27 ft, < 3DU/acre<br>28 ft, 3-10 DU/acre |

**Bicycle lanes** - The Manual requires the installation of bike lanes on all three- or- more lane roadway classifications. Provisions have been added in the Manual indicating that "bikeways" should be provided in accordance with approved community plans and the City's Bicycle Master Plan. As to bike lanes, there are good reasons why bike lanes are added on three- or- more lane

roadways regardless of what's shown on the Bicycle Master Plan. The main concept is that we should expect cyclists on these roadways with or without bike lanes. Based on this, such roadways should provide for the safety of bicyclists (particularly on high speed roadways) and also promote bicycling as an alternative mode. It should be noted that the San Diego County Bicycle Coalition fully supports adding bicycle lanes on three- or- more lane roadways.

In light of the above, on major streets, adding bike lanes works well with our intent to reduce speeds achieved by narrowing travel lanes. Major streets with bicycle lanes provide a better environment and are considered friendlier to bicyclists; bicyclists would not have to share eleven (11) foot wide travel lanes with a 45 mph vehicle. On collector streets, for three-lane collectors, we were able to accommodate landscaped medians and access needs of the Fire Department by increasing the curb to-curb width by only four feet (from 50 feet to 54 feet) and still provide bike lanes. A concern was raised related to increased crossing width for pedestrians as a result of adding bike lanes. The Manual includes measures to reduce pedestrian crossing distance (e.g., intersection pop-outs).

**Street lighting** – At the request of Councilmember Atkins, the current Council Policy on street lighting (Policy 200-18, Mid-block Street Light Policy for Developed Areas) was discussed by the ad-hoc committee. The current street lighting guidelines in the existing Street Design Manual address only roadway safety. Changes to provide an additional type of street lighting that addresses the needs of pedestrians were proposed. At the time of this writing, the recommended changes to the policy on street lighting have not been adopted by the City Council. As a result, the Street Lighting section of the Manual reflects current City policies on street lighting. However, guidelines for installing Pedestrian Scale lighting are included in the Manual. These guidelines can be used for projects desiring to include pedestrian scale lighting.

**Tree Selection Guide** - The Manual deleted the Tree Selection Guide table showing tree species applicable for various parkway widths. The City's Landscape Technical Manual offers more flexibility in terms of tree selection. Also, since this guide experiences continuous revisions to add/delete tree species, it is prudent to have this information contained in one source. The Manual references the Landscape Technical Manual for tree placement and selection.

**Transit Provisions** - Curb-to-curb width and right-of-way requirements for streets classified as Four-Lane Urban Collector and above have been revisited to address transit needs. A new section is introduced in the Manual depicting examples of adding exclusive transit lanes into the public right-of-way without the need to acquire additional right-of-way (refer to Appendix VII of the Manual).

**Parkways** - The Manual defines parkways as the area between face-of-curb and property line. It encompasses the sidewalk and the planting strip. The Manual requires a minimum planting strip width of six feet to allow for large canopy trees to be planted. Also, the Manual establishes the minimum sidewalk width as five feet.

The Manual requires wide parkways to be installed in conjunction with four- or- more lane

roadways. The wide parkways provide a wider buffer between vehicles and pedestrians and provide ample width within the planting area for trees with large canopy form to be planted. As stated, the Manual establishes the minimum sidewalk width as five feet. This width increases depending on the parkway configuration. For example on Four-Lane Major and Six-Lane Prime Arterial street classifications, the required parkway configuration is U4-b (refer to page 101 of the Manual). This parkway configuration requires six-inche clearance between the sidewalk and property line, six-foot sidewalk, 15 foot planting strip, and six-inch curb. This parkway configuration provides a 15.5-foot buffer between pedestrians and vehicular traffic.

**Curb Return Radius** – The old standards required 20-foot curb return radius at intersections of local residential streets and 30-foot curb return radius for all other intersections. The guidelines included in this draft Manual require 15 foot curb return radius at intersections of local residential streets, 20 feet at intersections of local residential with collector streets, 25 feet at intersections of collector streets, and 30 feet at all other intersections.

The Manual requires that curb return radii must accommodate the amount of traffic and type of traffic using these intersections. The curb return radii in the Manual were developed using truck turning templates corresponding to turning radii of large vehicles that will frequent the streets (e.g., local streets: emergency vehicles, refuse collection; major streets: transit vehicles). Further reduction of the specified curb return radii may impact the safe turning speeds at intersections as well as accessibility of intersection by various vehicle sizes including refuse collection trucks.

CONCLUSION

The Street Design Manual was presented to the Community Planners Committee and the Planning Commission, and they both recommended approval of the Manual for adoption by City Council. We recommend that the Committee on Land Use and Housing forward the Street Design Manual to Council for adoption.

Respectfully submitted,

S. Gail Goldberg, A.I.C.P
Planning Director

Approved: P. Lamont Ewell
Assistant City Manager

GOLDBERG/GWH

Note: Attachment No. 1 is not available in electronic format. A copy is available for review in the Office of the City Clerk.

Attachments: 1. Street Design Manual – Final Draft
2. Underground utilities within 30 foot curb-to-curb street width
3. Underground utilities within 28 foot curb-to-curb street width
4. Letter from Fire Chief Jeff Bowman, June 21, 2002